

FOREIGN POLICY REPORTS

October 1, 1938

Economic Consequences of Rearmament

BY WILLIAM T. STONE

PUBLISHED TWICE A MONTH BY THE

Foreign Policy Association, Incorporated

EIGHT WEST FORTIETH STREET, NEW YORK, N. Y.

VOLUME XIV · NUMBER 14 25¢ a copy \$5.00 a year

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with the aid of the Research Staff of the Foreign Policy Association

WORLD armament expenditures reached a new peak in 1938. Even after making adjustments for changes in the level of prices, military expenditures are more than four times as large as they were in 1913. The rate of acceleration is without precedent in modern times except for the period of actual hostilities during the World War. Within the space of four years, world expenditure for military purposes has more than trebled, rising from a total of 5 billion dollars in 1934 to approximately 15 billion dollars in 1937. Estimates for 1938 indicate a total exceeding 18 billion dollars before the end of the current year.

Responsible statesmen and economists have sounded repeated warnings that the consequences of rearmament cannot be disregarded with impunity. The economic consequences, while perhaps less obvious than the political, are not less portentous. For the process of rearmament has itself introduced a new and dangerous element in world economy. It has already become a powerful factor in the internal economy of an increasing number of states, capitalist democracies as well as authoritarian dictatorships. As a British journal recently observed, certain developments raise "the whole question whether capitalism can arm for totalitarian war and survive in anything like its present form."¹ Many fundamental questions are raised by the flow of investment capital into heavy industry for war purposes and by the growing trend toward governmental intervention in the economic life of nations. Other questions are evoked by the continuance of deficit financing. Even before 1936 every great power except Britain had abandoned the attempt to finance rearmament and meet the current costs of government without resort to borrowing. Today, with Great Britain borrowing for rearmament, virtually no government is operating on a balanced budget. Furthermore, the increasing share of na-

tional income consumed by war preparations has already begun to have its effect on other types of economic activity and to threaten social services and civil expenditures of government.²

WORLD ARMAMENT EXPENDITURE

Some conception of the size of the financial stake in rearmament is afforded by figures of expenditures shown in the table opposite.

No less important than the total amounts spent for military purposes is the *rate of increase*. As shown in the world table, military expenditures began to rise about 1932, increasing approximately one billion dollars during the next two years. Between 1934 and 1936, however, world expenditures rose by more than 7.9 billion dollars, to a total of 12.9 billion, and between 1936 and 1938 at least another 4 billion. About 80 per cent of this huge increase was due to the arms programs of the seven great powers, whose combined military expenditures may reach the staggering total of 13 or 14 billion dollars this year. The relative size and rate of expenditure is shown by comparison with the pre-war armament race. During the ten years before the war, the military expenditures of the same great powers rose from about 1.5 billion dollars to just over 2.4 billion dollars—a relatively "modest" increase of about 60 per cent.³ While the pre-war arms race was accompanied by symptoms of financial strain, it did not act as a major inflationary force nor did it perceptibly alter the established structure of the great capitalist democracies. The distinctive feature of the current rearmament race

1. Cf. *New Statesman and Nation* (London), April 30, 1928, p. 717.

2. For a general discussion of economic aspects of rearmament, cf. G. D. H. Cole, "The Economic Consequences of War Preparation," in the symposium *Dare We Look Ahead* (New York, Macmillan, 1938); A. S. S. Baster, "Some Economic Aspects of Rearmament," *International Labour Review*, February 1938.

3. For an excellent survey of pre-war arms competition, cf. Per Jacobsen, *The Economist* (London), Armaments Supplement, October 19, 1929.

FOREIGN POLICY REPORTS, VOLUME XIV, NUMBER 14, OCTOBER 1, 1938

Published twice a month by the FOREIGN POLICY ASSOCIATION, Incorporated, 8 West 40th Street, New York, N. Y., U.S.A. **RAYMOND LESLIE BUELL**, *President*; **WILLIAM T. STONE**, *Vice President and Washington representative*; **VERA MICHELES DEAN**, *Editor and Research Director*; **HELEN TERRY**, *Assistant Editor*. *Research Associates*: **T. A. BISSON**, **JAMES FREDERICK GREEN**, **FREDERICK T. MERRILL**, **HELEN H. MOORHEAD**, **DAVID H. POPPER**, **ONA K. D. RINGWOOD**, **PAUL B. TAYLOR**, **CHARLES A. THOMSON**, **JOHN C. DEWILDE**. Subscription Rates: \$5.00 a year; to F.P.A. members \$3.00; single copies 25 cents. Entered as second-class matter on March 31, 1931 at the post office at New York, N. Y., under the Act of March 3, 1879.

NATIONAL DEFENSE EXPENDITURES OF THE WORLD, 1932—1937-38¹
(in millions of dollars)

	1932	1933	1934	1935	1936	1937	1938 (approx.)
NORTH AMERICA ²	699.0	575.3	748.6	947.7	1,004.8	1,049.4	1,123.0
United States	667.8	540.3	710.0	911.7	964.9	992.1	1,065.7
SOUTH AND CENTRAL AMERICA	157.0	158.4	189.8	181.3	179.1	181.0	190.0
EUROPE	2,458.0	2,690.8	3,519.4	7,053.7	11,185.4	12,806.9	14,211.4
Britain	426.1	455.5	480.6	595.6	846.9	1,263.1	1,693.3
France	509.2	678.8	582.7	623.8	834.4	909.2	1,092.1
Germany	253.5	299.5	381.5	2,600.0	3,600.0 ⁶	4,000.0 ⁶	4,400.0 ⁶
Italy	270.6	241.2	263.7	778.1	916.1	573.4 ⁶	526.0 ⁶
U.S.S.R.	282.5	309.5	1,000.0	1,640.0	4,002.4	5,026.0	5,400.0
Central Europe and Balkans ³	414.1	407.6	497.7	496.7	438.8	472.4	500.0
Others (14 countries) ⁴	302.0	298.7	313.2	319.5	546.8	562.8	600.0
FAR EAST (6 countries)	469.7	538.3	573.6	593.3	606.7	1,431.4	2,056.9
Japan	199.1	253.1	271.9	296.2	305.1	1,129.8	1,755.3
China	93.0	108.1	112.5	93.1	95.3	95.3	95.3
Others ⁵	177.6	177.1	189.2	194.0	206.3	206.3	206.3
WORLD TOTAL (60 countries)	3,783.7	3,962.8	5,031.4	8,776.0	12,976.0	15,468.7	17,581.3

This table represents only an approximate comparison between different countries, as changes in currency value, internal purchasing power and governmental policies make accurate comparison impossible. Conversion rates are taken principally from United States Department of Commerce, *Commerce Reports*.

In cases where the fiscal year does not coincide with the calendar year, the earlier date has been used in this table; e.g., 1931-1932 is listed as 1931.

A number of totals from minor states could not be ascertained for this table. In such cases the figure for the preceding year has been arbitrarily repeated. In the case of China, no complete figures have been published since 1936. In 1936 figures for Spain are available only for the first half of the year; this was doubled for the purposes of the table. Totals for Germany and Italy for 1934-1936 represent unofficial estimates.

This table includes 60 countries. A few minor countries, such as Saudi Arabia, Iraq, Afghanistan, and the expenditures of mandates and African colonies which do not appear in the budget of the mandatory or parent country have been omitted, due to lack of information.

1. Sources: League of Nations, *Armaments Year Book*, 1936, Geneva; official budgets and miscellaneous official papers, etc.

2. United States, Canada and Mexico.

3. Albania, Austria, Bulgaria, Czechoslovakia, Greece, Hungary, Poland, Rumania, Turkey, Yugoslavia.

4. Belgium, Denmark, Estonia, Finland, the Irish Free State, Latvia, Lithuania, Luxemburg, the Netherlands and Netherlands Indies, Norway, Portugal, Spain, Sweden, Switzerland.

5. Australia, India, New Zealand, Siam.

6. Unofficial estimate.

is the extent to which it has interfered with normal economic trends and has already begun to transform the structure of those states which have so far avoided the extreme forms of state control found under fascism and communism.

The following summary indicates some of the economic and financial aspects of rearmament in the seven great powers.

THE TOTALITARIAN STATES

Germany

One advantage enjoyed by the totalitarian states in the current rearmament race is secrecy. Public opinion in the democracies voices its criticism and expresses its lack of confidence in the government on the basis of facts and figures furnished by the government itself. The dictatorships have been able

to avoid much embarrassment by the simple device of not making public vital information which might undermine confidence in the state or its national policies. This is well exemplified in Germany, where the National Socialist government has transformed the economic structure of the nation in carrying out a vast rearmament program designed to make the Third Reich the dominant military power in Europe. In the space of three years, Germany has organized a conscript army of over 800,000 men equipped with modern instruments of mechanized warfare, built the most powerful air force in Western Europe and constructed a small but efficient navy.⁴ Yet because of the sec-

4. For a review of the first stage of Germany's rearmament, cf. W. T. Stone and Helen Fisher, "The Rising Tide of Armament," *Foreign Policy Reports*, February 15, 1937. Germany's reserve strength is still inferior to that of France, as the first

recy surrounding every phase of rearmament in Germany, very little is known about the methods by which this amazing transformation has been achieved.

Even the cost of German rearmament is unknown. The last budget issued by the Reich covered the fiscal year ending March 31, 1935. Since then the Nazi régime has published no budget estimates, no report on government expenditures, and no complete statement of short-term indebtedness. On the basis of certain known factors, and taking account of probable concealed borrowing, foreign observers have estimated that Germany must have spent somewhere between 30 and 40 billion Reichsmarks (12 to 16 billion dollars) on rearmament during the past three years.

The known factors may be analyzed briefly as follows: Since 1933-1934 Reich revenues from taxes and customs have risen from Rm. 6,846 million to Rm. 13,600 million in 1937-1938—representing an increase of Rm. 16,300 million for the full five-year period. During the same period, while tax revenues were rising, expenditures for unemployment relief were falling at a rapid rate. The net saving during the five-year period was approximately Rm. 7,500 million. If these savings are added to the increase in tax revenues, it is seen that new funds available to the government amounted to nearly Rm. 2.4 billion during the five-year period.⁵

During the past three fiscal years alone, the surplus amounted to no less than Rm. 20 billion, a sum which was available for rearmament and public works without resort to borrowing. A large part of the cost of rearmament and public works, however, has been financed by borrowing, only a part of which is shown in the recorded debt. From March 31, 1935 to March 1938, the net increase in the public debt amounted to approximately Rm. 5,800 million. The increase in the short-term debt, on the other hand, has been carefully concealed, and unofficial estimates vary widely, ranging from Rm. 10 billion to more than 22 billion.⁶ This short-term borrowing enabled the government to pay

private contractors for construction work, including expansion of plants and factories, war material and munitions, by means of labor creation bills which were theoretically "accepted" by certain special institutions. These bills, originally issued for short periods, could be extended up to five years, and discounted at savings banks and credit institutions. They could also be rediscounted by the Reichsbank.⁷ Even if the minimum estimate for these bills is accepted, the total amount made available from borrowing for purposes of rearmament and public works could hardly have been less than Rm. 15 billion for the last three years. This sum, added to the 20 billion budget surplus, gives a total of about Rm. 35 billion (14 billion dollars) available for rearmament and public works.⁸

The German press boasts that the whole National Socialist program has been carried forward without inflation and without disrupting the German security markets. According to official figures, the index of industrial production (1928=100) rose from a low point of 54.0 in 1932 to 107.0 in 1936, and 121.6 in the third quarter of 1937; national income increased from Rm. 45.2 million in 1932 to Rm. 68.5 million in 1937. Total revenue from national, provincial and local taxes increased from Rm. 10.2 billion to Rm. 18.0 billion.⁹ Unemployment declined from 6,014,000 at the end of January 1933 to less than 500,000 at the end of 1937. By midsummer of 1938 official government agencies were reporting a shortage of labor, and formulating plans for conscription of workers.¹⁰

This optimistic picture of Germany's economic position is questioned by many foreign critics, who point to the obvious fact that this returning prosperity rests largely on unproductive armament and public works expenditures. In 1937 Germany's armament expenditure represented approximately 15 per cent of the national income, as compared with 11 per cent for France, 6.6 per cent for Great Britain and 1.4 per cent for the United States. Production in the consumption goods industries has lagged far behind the increase in capital goods and heavy industry.¹¹ Moreover, the level of money wages in

class of conscripts, numbering about 250,000 men, did not complete its training until November 1937. When the second class enters the reserves, the total of newly trained reserves will not exceed 600,000, as compared with about 3,000,000 trained reserves in France.

5. Compiled from Report of Reichs-Kredit-Gesellschaft Aktiengesellschaft, *Germany's Economic Situation at the Turn of 1937-1938* (Berlin, 1938).

6. Cf. *The Economist* (London), August 1, 1936; *The Banker* (London), February 1937; Vasa Trivanovich, "Economic Development of Germany Under National Socialism," *National Industrial Conference Board Studies*, No. 236 (New York, 1937); Emil Lederer, "Who Pays for German Armament?" *Social Research* (New York, New School for Social Research), February 1938.

7. In March 1938 Dr. Schacht announced that this financing by bills of exchange would be discontinued. Cf. Berliner Handels-Gesellschaft, *Economic Report*, Vol. V, No. 3 (Berlin, March 1938).

8. This estimate corresponds closely to an unofficial estimate by Norman Crump, "Economic Conditions in Germany," *The Financial Times* (London), December 1937, p. 22.

9. Compiled from *Quarterly Reports of the Institut Für Konjunkturforschung*.

10. Cf. *New York Times*, July 3, 1938.

11. The number of workers employed in heavy industry rose from 2,521,000 in 1932 to 6,053,000 in 1937, while workers in consumption goods industries rose from 2,778,000 in 1932 to 3,906,000 in 1937. Cf. *Germany's Economic Situation at the Turn of 1937-1938*, cited, p. 36.

Germany has declined and real wages have not kept pace with the rapid increase in production, indicating a decline in the standard of living.¹²

Two fundamental weaknesses in German economy have not been removed by the National Socialist régime. One is the continued dependence of the Reich on foodstuffs and raw materials produced abroad; the other is lack of foreign exchange with which to purchase such needed materials and to carry out the ambitious program of the second Four-Year Plan. Despite recent assertions to the contrary, both weaknesses are confirmed in official statistics. While agricultural production rose from Rm. 8.7 billion in 1932 to over 12 billion in 1937, Germany could provide only 81 per cent of its domestic needs from its own territory.¹³ Production of German iron rose from 1.3 million tons in 1932 to 9.6 in 1937, but the latter figure represents only about one-third of the total domestic consumption. Austrian iron may increase the total Reich production to 14 million tons in 1938, but this will still leave Germany dependent on foreign countries for half of its normal iron requirements. It seems exceedingly doubtful whether the Four-Year Plan—and particularly the Hermann Goering Works—will actually meet this shortage by 1940.¹⁴

The second weakness—lack of foreign exchange—was temporarily relieved by the annexation of Austria. According to the Reichsbank returns, German holdings of gold and foreign exchange amounted to only Rm. 76.2 million in March 1938. Although Austria's reserves increased this sum by Rm. 290 million, Germany's foreign exchange position remains precarious.¹⁵ During 1937 only about 15 per cent of Germany's foreign trade was carried by free foreign exchange, the remainder being conducted under clearing agreements, barter arrangements and *Aski* Mark accounts.¹⁶ While German exports increased slightly from Rm. 5.7 billion in 1932 to 5.9 in 1937, the surplus of exports over imports dropped during the same period from 1.07 billion to .44. With the heavy demand for raw materials the shortage of foreign exchange will become increasingly onerous and may force the Reich

to adopt drastic measures to expand its export trade.

The ultimate consequences of Germany's dynamic drive toward autarchy and military power remain an open question. If war is postponed or avoided, Germany will still face an economic dilemma. The Nazi régime, having restored productivity and conquered unemployment by public spending on a vast scale, is now confronted with two alternatives: it may continue its own investment activity undiminished, or it may seek to return to an economy resting primarily on private initiative. If it chooses the first course—as seems likely—it faces the danger of increasing the public debt to a point which is too heavy for the nation to bear. That point has not yet been reached. Up to the present, public spending has been "productive" in the sense that it has increased the ability of the people to pay taxes and thus finance rearmament and public works without too great a strain on the debt structure. But now that full employment has almost been achieved, "productive" expenditure becomes much more difficult. In order to increase the ability of the people to pay higher and higher taxes, the régime is compelled to find new enterprises which will yield higher wages and profits. The difficulties of accomplishing this by state spending are obvious, and the dangers are equally apparent. For if the state spending program is not "productive," the state will be forced to finance its program by piling up the public debt. In the end this process can only lead to bankruptcy.

Italy

The national economy of Italy, like that of Germany, is geared to a program of autarchy based on the wartime needs of the nation. Like Germany, Italy is carrying forward a vast armament program, the full cost of which is not revealed to the Italian people or the outside world. In the midst of this program, Italy sent an army of 300,000 men to Ethiopia and maintained a substantial armed force on Spanish soil for over two years. The peace time army in Italy has been raised to a strength of over 600,000 men, the air force has been nearly doubled in four years, and the navy has undertaken a building program which will almost equal France's fleet by 1941.¹⁷ This program has been supported by a nation whose national income is about 120 billion lire, whose income from taxes

12. Cf. Lederer, "Who Pays for German Rearmament?" cited; also John C. deWilde, "Social Trends in the Third Reich," *Foreign Policy Reports*, May 1, 1937.

13. Cf. Hitler's speech before German Reichstag, February 20, 1938. English translation from *News in Brief*, published by Deutscher Akademischer Austauschdienst E.V. (Berlin), March 14, 1938.

14. *The Economist*, March 19, 1938; also special article on Germany's mineral resources, *ibid.*, July 3, 1937, p. 6.

15. "Austria's Value to Germany," *ibid.*, March 26, 1938, pp. 672-73.

16. Cf. Reichs-Kredit-Gesellschaft, *Report*, cited, p. 92.

17. Accurate figures of first-line air strength are not available, though Italy is reputed to have 1,200 first-line planes, as compared with 1,000 for France, 1,500 for Britain and over 2,000 for Germany. In July 1938 Italy had under construction 89 naval vessels of 237,772 tons, as compared with 45 ships of 196,977 tons for France.

does not exceed 25 billion, whose dependence on foreign sources of supply for essential raw materials is much greater than that of Germany, and whose trade balance has been consistently adverse for many years.

How this has been accomplished without disas-

trous inflation or financial collapse is not fully revealed in official explanations offered by the Fascist government. Treasury statements and the annual budgets give only a partial answer. The following table shows the budgetary position over the past ten years.

ITALY'S BUDGET POSITION¹
(in millions of lire)

Fiscal Year ²	Effective Tax Income	Total Government Expenditure	National Defense Expenditure	Surplus (+) or Deficit (—)	Per Cent of National Defense to Total Expenditure
1930	19.8	19.6	5.3	+ .2	27.0
1931	20.4	20.9	5.6	— .5	26.8
1932	19.3	23.2	5.4	— 3.9	23.3
1933	18.2	21.7	5.4	— 3.5	24.9
1934	18.1	24.4	4.8	— 6.3	20.0
1935	18.8	20.8	5.6	— 2.0	26.9
1936	20.4	33.1	15.5 ³	—12.7	46.8
1937	24.7	40.9	17.4 ³	—16.2	42.5
1938 (Est.)	23.7	35.7	10.9 ⁴	—12.0	30.6
1939 (Est.)	25.1	35.1	10.0 ⁴	—10.0	30.0

1. Compiled from budget estimates, published in *Gazzetta Ufficiale*, 1930-1938; League of Nations, Economic Intelligence Service, *Public Finance, 1928-35—Italy; Armaments Year Book, 1930-1937*.

2. Fiscal year ends June 30.

3. Includes extraordinary expenditure for Ethiopian war.

4. Unofficial estimate, including probable extraordinary expenditures in East Africa and Spain. Ordinary budget appropriated 6.3 million lire for national defense in 1937-1938 and 5.8 million in 1938-1939.

These published figures show that the Fascist government has been operating on an increasingly heavy deficit since 1931. Up until 1936 the deficit was relatively moderate, totaling 16.5 billion lire over five years; during the Ethiopian war, however, it increased by more than 41 billion in three years. The internal debt, which stood at 86.4 billion lire in 1928 rose to 124.5 billion in 1937.¹⁸ The figures also indicate that most of this deficit was used for national defense and prosecution of the Ethiopian campaign. As the government has not made public details of its extra-budgetary expenditure since 1935, however, it is impossible to determine the actual total of expenditures and the proportion devoted to rearmament. Decrees published in the *Gazzetta Ufficiale* during the Ethiopian war indicate that the cost of the East African campaign amounted to about 12 billion lire in 1936 and 16.5 billion in 1937, most of which was used for military purposes. For 1938 the ordinary budget appropriated only 6.3 billion lire for the war, navy, air and colonial ministries, but large additional credits were authorized in an extraordinary budget and in special decrees. Thus, on June 21, 1937, the Council of Ministers approved an annual contribution of one billion lire "to balance the East African

budget." At the same time a special appropriation of 12 billion lire for a six-year public works program and another 3 billion for road construction were approved.¹⁹ Recent reports indicate that the whole East African program has been slowed down and many ambitious projects abandoned altogether.²⁰ Nevertheless, actual military expenditures in East Africa have certainly exceeded the 664 million lire shown in the ordinary and extraordinary budgets for 1937. Nearly 100,000 Italian troops were kept in Ethiopia in 1937 and the "permanent program" announced in the Chamber of Deputies on March 19, 1938 contemplates a peace time garrison of 25,000 Italian troops and 43,000 colonials. The Rome correspondent of the London *Financial News* estimated that the "maintenance cost" of the East African program was 400 million lire a month, or about twice the official budget figure.²¹ The same journal estimated that Italy was spending about 100 million lire a month—or 1.2 billion a year—on Italian troops in Spain. Even if these estimates are high, it seems likely that extra-budgetary expenditure for military purposes (including Ethiopia, Spain and expansion of armament production in

19. *Gazzetta Ufficiale*, June 21, 1937.

18. League of Nations, *Public Finance, 1928-35—Italy*, cited; also *The Economist*, July 23, 1938.

20. *Ibid.*; March 19, 1938; cf. also *New York Times*, May 18, 1938.

21. Cf. *Financial News* (London), December 23, 1937.

Italy) amounted to at least 5 billion lire in 1937 and 1938. This would account for about half of the avowed deficit for these years.

Most of the money required to meet the large deficits incurred since 1935 has been raised by loans and borrowing from the Bank of Italy. In facing deficits, the totalitarian states undoubtedly enjoy advantages denied to democratic states like France. The Italian people are left in ignorance of the precise state of the treasury, and the Fascist government is able to resort to compulsion whenever necessary. Compulsion was used with success in the large Real Estate Loan floated in October 1936. This was a 5 per cent, 25-year redeemable loan, under the terms of which all owners of real estate were required to subscribe not less than 5 per cent of the assessed value of their land. Payment was required in six quarterly instalments beginning January 1, 1937. Other forced loans included the exchange of government bonds for foreign exchange holdings appropriated from the public and sold by the state.²² The funds raised by these means amounted to about 28.5 billion during 1936 and 1937, while about 3 billion lire was borrowed from the Bank of Italy. Thus, by using its wide powers over industry and finance, the government has been able to control the direction of the flow of savings and to absorb an increasing proportion of the nation's savings. It seems most unlikely, however, that the total revenue from taxes can be increased much further.

This huge borrowing and spending program has been the chief factor in maintaining the high level of industrial activity which continued through 1937 and the first months of 1938. But this high level has not been uniform. As in Germany, the index of industrial production shows that the largest increases have been in the heavy industries supplying the abnormal war trade. While production in the textile industries rose from 67.4 in 1932 (1928=100) to 83.7 in 1937, the index for mechanical and metallurgical industries increased from 70.7 to 130.1 during the same period.²³ Thus in Italy, as in Germany, Japan and other countries, feverish armament activity has not only stimulated production in heavy industries but has also brought about a fundamental redistribution of industry. This transformation of the national economy has apparently been accompanied by a decline in the standard of living, for despite the rise in employment, wages have remained fairly static and con-

sumption of foodstuffs, including wheat flour, cereals, sugar and coffee, has declined.²⁴

In the immediate future, Italy faces the same fundamental problems confronting Germany: how to overcome its dependence on raw materials from abroad and how to find the foreign exchange to purchase essential supplies which cannot be produced at home. In both respects, Italy's position is more vulnerable than that of the Reich. While the Fascist government has undertaken the intensive development of low-grade iron deposits, it can never hope to be independent of foreign countries for coal, oil and other vital materials. With an adverse balance of trade, Italy has been hard put to find the foreign exchange to pay for essential imports. In the boom year 1928, Italian imports amounted to 21.9 billion lire, as against exports of 14.5 billion—an adverse balance of 7.4. This adverse balance almost disappeared in 1936, but only because of the application of sanctions which reduced Italian imports to 5.9 billion lire and exports to 5.4 billion. With the revival of foreign trade in 1937, the excess of imports again rose to 5.6 billion lire,²⁵ a very large figure for a country whose gold reserves had been seriously depleted. The precise value of Italy's reserves today is not known, as the government has not revealed how much gold and foreign exchange was brought in by the intensive campaign waged during the sanctions period. It is known, however, that the reserves of the Bank of Italy have shrunk to 4.02 billion lire, or 22 per cent of the total note circulation, despite a write-up of 69 per cent at the time of the devaluation in 1936. Even assuming that secret reserves are equal to this sum, the total amounts to only about 8 billion devalued lire, or some \$350,000,000. This is undoubtedly the weakest point in Italy's armor.

Japan

The pressure of military expenditure had begun to be felt in Japan long before the outbreak of war in China. The Manchurian campaign of 1931-1932 ushered in a series of "emergency" armament programs which increased the military and naval budgets from 454.6 million yen in 1932 to 1,021.5 in 1936. The promise of General Araki that the huge increases demanded for the emergency would be "temporary" proved illusory and successive governments found it impossible to return to normal expenditure.²⁶

The outbreak of hostilities in North China in July 1937 was followed almost immediately by a

22. Cf. "Italy's Exchange Weakness," *The Economist*, July 23, 1938.

23. Cf. *The Economist*, July 9, 1938, p. 56.

24. *Ibid.*, p. 56.

25. *Ibid.*, July 23, 1938.

26. Cf. "Trade and Industry in 1937-1938," *Oriental Economist*, Supplement, p. 28.

drastic revision of the original budget estimates, and beginning on July 23 the Konoye government introduced in rapid succession two supplementary budgets totaling 527.2 million yen to cover military expenditures in China. Two months later the 72nd Diet created a Special Account of Extraordinary Military Expenditures and appropriated 2,023 million yen to cover expenditures until the end of January 1938.²⁷ When the possibility of peace negotiations vanished early in 1938, the Konoye Cabinet presented still another supplementary budget calling for 4,850 million yen under the Special Account to be spent during the fiscal year 1938-1939. These amounts were to be used exclusively for the "China incident" and were in addition to the general budgets adopted by the Diet. The relation of these huge military expenditures to the total budget may be seen from the following table.

JAPAN'S BUDGET POSITION¹

(in millions of yen)

	1935-36	1936-37	1937-38	1938-39
Tax revenue	1,405	1,562	1,827 ²	2,202 ²
Expenditures				
National Defense ³	1,022	1,060	1,412	1,246
China War ⁴			2,529	4,850
All other	1,184	1,222	1,592	2,269
Total authorized expenditure	2,206	2,282	5,533	8,365

1. Compiled from *Oriental Economist*, cited; also *Monthly Circular*, Mitsubishi Economic Research Bureau (Tokyo), No. 174, April 1938.

2. Estimated.

3. National defense expenditures authorized in the ordinary and extraordinary budgets.

4. Includes all supplementary appropriations for the China war authorized by the Diet and carried in the "Special Account" budget. Actual expenditures in 1937-1938 were less than the amount authorized, and the balance was carried forward to the next fiscal year.

If the total amounts appropriated for war purposes should actually be spent during 1938-1939, the military budget would represent about 72 per cent of the total authorized expenditure, 46 per cent of Japan's estimated national income (about 13 billion yen), and 84 per cent of total foreign trade in 1937 (7.2 billion yen). At the rate of spending during the first year of the China conflict, however, it is unlikely that the vast sums demanded by the militarists will actually be expended by the end of March 1939. War loans issued under the Special China Account up to June 15, 1938 amounted to no more than 2,400 million yen.²⁸ Even this

sum, it should be noted, almost equals the total cost to Japan of the Russo-Japanese war, which amounted to about 2,800 yen in terms of current value. Estimates of the actual deficit for 1938-1939 reach the staggering sum of 5,600 million yen.²⁹

The results of this deficit financing are shown in the public debt, which rose from 7,248 million yen in 1934 to 13,021 million in March 1938, a figure almost equal to Japan's national income.³⁰ The fiscal problem was made even more acute by the heavy adverse balance of trade in 1937, which forced the government to resort to large shipments of gold for the first time since 1931. The excess of merchandise imports during the year 1937 amounted to 636 million yen, as compared with 130 million in 1936 and 14.7 million in 1935.³¹ Gold exports reached nearly 850 million yen from March to December 1937.³² By July 1938 Japan's exchange position had become acute, and the government was forced to consider using 300 million of its remaining 800-million-yen reserve in a foreign exchange revolving fund to finance purchase of raw materials.³³

The National Mobilization law, adopted in March 1938, was the most far-reaching of a series of economic control measures passed in 1937 and 1938.³⁴ Drafted by the army and the Planning Board, and forced through the Diet in the face of strong vocal opposition from leaders of both major political parties, the law was applicable not only in time of war but also during "incidents" or other national emergencies. While the government sought to assure critics in the Diet that the measure would not be invoked in the China conflict, pressure from the army quickly led to its partial application. The law, comprising 50 articles, enables the government to dictate, by decree or Imperial ordinances, conditions governing prices, wages, labor disputes, capital investments, foreign trade, production and distribution of vital war materials. It empowers the government to expropriate lands, houses, plants and other working facilities

29. *Oriental Economist*, Supplement, cited, p. 30.

30. By the end of 1938 the national debt will approximately equal national income. Cf. T. A. Bisson, "Japan's Home Front," *Foreign Policy Reports*, September 1, 1938.

31. Tokyo, Department of Finance, *Monthly Return of Foreign Trade of Japan*, December 1937, p. 3; *Oriental Economist*, June 1938.

32. Gold exports to the United States, begun in March 1937, reached a total of \$329,400,000 (1,136 million yen) by July 1938, according to estimates of the Federal Reserve Bank of New York. Cf. *New York Times*, July 19, 1938.

33. *New York Times*, July 17, 1938. For a survey of the financial and economic position in 1938, cf. Bisson, "Japan's Home Front," cited.

34. *Japan Weekly Chronicle*, March 24, April 7, 1938; for the most complete summary in English, cf. *New York Herald Tribune*, March 25, 1938.

27. *Ibid.*, p. 29.

28. *Oriental Economist*, Supplement, cited, p. 29, and *Monthly Circular*, cited.

necessary for mobilization enterprises; to confiscate newspapers or other publications violating censorship decrees and to conscript workers and specialists of all kinds. A few weeks after its passage, sections of the law requiring registration of all adults and examination of the books of industrial concerns were put into effect.³⁵

Equally significant was the change in Japan's industrial structure brought about by the expansion of heavy industry to meet the needs of a wartime economy. The dominant position held by the old industrial and banking group, headed by Mitsui and Mitsubishi, was undermined by new and vigorous industrialists like the Aikawa interests whose prosperity was linked with the armaments boom and whose influence was used to support the army program.³⁶ This transformation is reflected in the index of industrial production for 1937, which shows declining production in many branches of the silk and textile industry and sharp increases in heavy industry, particularly pig iron, steel, machinery and implements, mineral products and other items used in the war industries.³⁷

Thus the economic dilemma confronting Japan is essentially similar to that facing the two fascist powers in Europe. All of these countries are seeking to transform their economic structures to meet the needs of a war economy which demands raw materials from abroad; all are hard pressed to find the necessary foreign exchange to pay for imports of vital raw materials, and have virtually exhausted their gold reserves; all three face the prospect of continued deficit financing.

The Soviet Union

Standards of comparison used in analyzing the economic and financial effects of rearmament in Germany, Italy and Japan are scarcely applicable to the Soviet Union. Under a socialized economy, the state not only controls all means of production, but also controls all capital investment and fixes all wages and prices. In the Soviet Union at least 95 per cent of the national income passes directly through the state budget, whereas in fascist states and capitalist democracies the largest share of national income is derived from private enterprise. The consolidated budget of the U.S.S.R. (including national, state and local budgets) provides for the financing of national economy as well as social and cultural activities and ordinary administrative expenditures. The principal source of state revenue comes directly from socialist economy in the form

of a turn-over tax and a profit tax levied on the socialized sector of the national economy. In 1937 over 83 per cent of the total revenue came from these sources, while only about 5 per cent was raised by state loans.³⁸

The following table, based on the consolidated budget, indicates the source and distribution of Soviet income in recent years.

INCOME AND EXPENDITURE OF SOVIET UNION*

(in billions of rubles)

	1934	1935	1937	1938
INCOME				
(a) Taxes and Profits	45.0	62.8	92.1	117.3
(b) State Loans	3.8	3.1	5.9	7.7
Total Income	48.8	65.9	98.0	125.0
EXPENDITURE				
National Economy	33.3	35.1	39.5	47.2
Social and Cultural	8.4	13.1	26.6	31.4
National Defense	2.8	6.5	22.8	27.0
All Other	4.3	10.7	8.2	18.6
Total Expenditure	48.8	65.4	97.1	124.2

*Compiled from State Budget of the U.S.S.R., 1934-1938.

Two significant trends are revealed in these budget figures. First, it will be noted that the income of the Soviet Union has nearly trebled during the past five years, as a result of rapid expansion of the national economy under the first two Five-Year Plans. In the second place, the proportion of this income consumed by national defense has increased from 5.7 per cent in 1934 to 22 per cent in 1938. The actual share of the budget devoted to rearmament and national defense is even greater if additional defense appropriations carried under other heads are included. In 1937 over 2.3 billion rubles was appropriated for the Commissariat of Home Affairs (formerly the GPU) and several billions was spent for defense industries, construction of strategic railways and roads, for border guards, etc. Including these additional items, the total cost of national defense may be as much as 40 per cent of state income from all sources. When it is recalled that state income is virtually synonymous with national income, the extent of this drain on Soviet economy may be readily seen. In any case, the proportion of national income consumed by armament activity is larger than any other country, with the possible exception of Japan.

35. *New York Times*, June 24, 1938.

36. Cf. T. A. Bisson, *Japan in China* (New York, Macmillan, 1938), pp. 236-43.

37. *Oriental Economist*, March 1938, pp. 148-49.

38. For a survey of industrial and agricultural development in the Soviet Union, cf. Vera M. Dean, "Industry and Agriculture in the U.S.S.R.," *Foreign Policy Reports*, June 1, 1938.

Even before the Soviet Union embarked on its intensive rearmament drive in 1935, Soviet economy was profoundly influenced by the requirements of national defense. Under the first and second Five-Year Plans, the resources of the government were concentrated on development of heavy and defense industry, while production of much-needed consumers' goods was allowed to lag.³⁹ The backwardness of the country made this emphasis on heavy industry essential, but the hope of Soviet leaders that once the nation was equipped with adequate industrial facilities it could turn its attention to consumption goods was not realized. When the third Five-Year Plan was announced in January 1938, the world armament race was in full swing, and the government was compelled to concentrate on speeding up production of essential raw materials and expanding heavy industry. Thus, according to the plan for 1938, production of pig iron was to be increased 12 per cent over 1937, production of steel 15 per cent and rolled steel 16 per cent.⁴⁰ No figures are available for airplane production or any branches of the munitions industry, but production plans for other heavy industries show correspondingly sharp increases. While some consumers' goods also show sharp increases in recent years, the lag persists and production of certain important items has actually decreased. The production of canned goods fell off 27 per cent in 1937, while manufacture of cotton cloth rose by only 2.9 per cent.

In appraising the effect of this continued emphasis on defense and heavy industry, it is only fair to note that social and cultural expenditures have also been allotted a larger share of the total state income. Appropriations for education, public health, social security and labor protection carried under this head have increased from 8.4 billion rubles in 1934 to 31.4 in 1938.⁴¹

In contrast to the large deficits of the fascist powers and western democracies, the Soviet budget presents a series of balanced accounts. State loans have been used to finance rearmament and industrial expansion, but the total amount borrowed during the first and second Five-Year Plans did not exceed 25 billion rubles, and loans have not exceeded 5 per cent of the total budget since 1933. In July 1938, however, the Soviet government issued the largest loan in its history, amounting to 5 billion rubles. The bonds were purchased by workers and peas-

ants who responded to the "patriotic" appeal by oversubscribing the issue within a few days.⁴²

Official Soviet publications throw no light on the extent to which the far-reaching purge of former party leaders and high army officers has affected the economic efficiency of the U.S.S.R. or its industrial preparedness for war. How long the industrial machine could withstand the strain of a major war remains an open question.

THE DEMOCRACIES

Great Britain

Among the democratic states, no nation has approached Great Britain in the vigor with which it has pushed its rearmament program. Slow to start and reluctant to abandon traditional and cumbersome methods of administration, Britain did not get its program under way until 1936, two years after the first official warning that the national government intended to meet the challenge of German rearmament.⁴³ For the five years from 1930 to 1935 British armament expenditures ranged from £88.2 million to £93.5 million; in the latter year they increased to £99.1 million. Once the program was fully launched, however, expenditures jumped from £122.2 million in 1935-1936 to £319.6 for the year 1938-1939—an increase of approximately 160 per cent in the space of three years.⁴⁴ Even before the end of 1937, costs of rearmament began to outrun the staggering estimates made early the same year with the announcement of the five-year program.⁴⁵ Apart from increased cost of maintenance, the bulk of this huge fund is being spent on warship and airplane construction, capital investment in munitions plants, "shadow" factories and ordnance depots, and heavy purchases of war materials. The hope that rearmament could be financed out of current income was abandoned at the very beginning of the five-year program, which provided for a £400 million defense loan. Under this authorization the government borrowed £99.7 million in 1937 (of which only 64.9 was actually spent during the fiscal year), and expected to borrow £90 million more for the fiscal year 1938-1939.⁴⁶ Despite this forced resort to borrowing, the British government refused to take the easy path of unlimited deficit financing, and in its 1938-1939 budget pre-

42. Cf. *Moscow News*, July 5, 1938.

43. For a review of the first stage of British rearmament, cf. Stone and Fisher, "The Rising Tide of Armament," cited.

44. All British figures represent net expenditure, not including pensions and other non-effective services. Cf. *Army, Navy and Air Estimates, 1938* (London, H.M. Printing Office, 1938).

45. *Statement Relating to Defence Expenditure*, Cmd. 5374 (London, H.M. Stationery Office, 1937).

46. *The Economist*, April 30, 1938.

39. For detailed figures of annual rate of increase or decrease of output of essential articles, cf. Dean, "Industry and Agriculture in the U.S.S.R.," cited, p. 65.

40. Cf. *Moscow News*, June 28, 1938.

41. For summary of social expenditures, cf. statement of A. Zverev, Commissar of Finance, *Moscow News*, July 19, 1938.

sented the country with the heaviest tax increases since the World War.⁴⁷ The standard rate of income tax was raised from 25 to 27.5 per cent, while a long list of indirect taxes, including those on gasoline and tea, were raised substantially.

While the heavy tax burden and the high cost of rearmament drew almost no protest from the British public, the delay in carrying out important sections of the defense program brought severe criticism on the government. A sharp attack was centered on the Air Ministry during the Parliamentary debates in March, with Winston Churchill, Sir Archibald Sinclair and other critics charging that Germany's air strength was at least 50 per cent greater than Britain's; that British construction was lagging behind Germany's and that the organization of production was inefficient.⁴⁸ Replying to its critics, the government declared that the first objective of the air program—1,500 first-line planes for home defense by March 1937—had actually been achieved before the end of 1937; and that 1,750 first-line planes would be in commission early in 1939.⁴⁹ The government was unable to give a reassuring answer to the charge that this program was not equal to Germany's, and tacitly admitted the shortcomings of the program by announcing a new "goal" of 2,370 first-line planes for home defense by 1940.⁵⁰ Additional evidence of dissatisfaction with the coordination of aircraft production was furnished in April, when an official British Air Mission was dispatched to the United States and Canada for the purpose of placing orders for American airplanes to supplement the output of British factories.⁵¹ Another heated debate resulted in a reshuffle of the Cabinet on May 16, with Viscount Swinton resigning as Secretary of State for Air, to be replaced by Sir Kingsley Wood, a former Cabinet member, who had a reputation as an efficient organizer. Despite these damaging admissions, impartial observers were inclined to discount many of the extreme charges of the lag in British preparations.⁵²

47. Cf. speech of Sir John Simon, *The Times* (London), April 27, 1938; also *The Economist*, April 30, 1938.

48. Cf. *Parliamentary Debates*, March 7, 1938, Vol. 332, No. 68, pp. 1561-1604; March 15, 1938, Vol. 333, No. 74, pp. 225 *et seq.*

49. Statement of Lt. Col. Muirhead, Undersecretary of State for Air, *Parliamentary Debates*, March 15, 1938, p. 225.

50. The revised program calls for 2,370 first-line planes for the Metropolitan force; 490 for overseas, and 500 for the fleet air arm—a total of 3,360 planes, excluding reserves. As the present program calls for at least two reserves for each first-line plane, the total by 1940 may exceed 10,000 fighting planes. Cf. *The Economist*, *New York Times*, May 15, 1938.

51. The Mission is said to have recommended immediate purchase of about 400 American planes and possible establishment of new factories in Canada. Cf. *New York Times*, May 14, 1938.

Some of the economic effects of rearmament noted in the totalitarian states are also visible in Britain. Thus, in the financial field, statements by the Chancellor of the Exchequer and others indicate that the government is reconciled to a series of unbalanced budgets, with an increasing deficit and heavy taxes. According to unofficial estimates, national and local taxation in Britain will absorb about 22 per cent of the probable national income during the current year.⁵³ While British government deficits are small as compared with other great powers, the process of deficit financing has called forth sober comments from British financial journals.⁵⁴ On the other hand, Britain's financial resources are enormous in comparison with countries like Germany, Italy or Japan. The gold reserves of the Bank of England in March 1938 stood at £537 million (\$2,698,000,000), in addition to £298 million held in the Exchange Equalization Account. Britain's war chest is further strengthened by the nation's overseas investments, whose "real" value was estimated at £3,236 million (\$16,180,000,000).⁵⁵

In Great Britain, as in other countries, the industrial structure is being distorted by the exigencies of rearmament. A memorandum on Britain's long-term budget problem prepared by a group of British economists points out that "the productive capacity of many industries, such as iron and steel, shipbuilding, and certain branches of engineering, is being expanded to a level which, apart from rearmament, would be greatly in excess of our requirements."⁵⁶ This expansion in the field of heavy industry began to be felt in 1936, at about the time that the building boom began to sag, and undoubtedly helped materially to sustain production and employment in the construction and engineering trades. During 1937 and 1938 direct government expenditures for "shadow" factories, airdromes, barracks, naval vessels and aircraft equipment actually exceeded the total value of private houses constructed in Great Britain. The 1938 budget appropriated over £100 million for airplane construction and purchase of aircraft material, £78 million for shipbuilding and naval armaments, and some £44 million for "capital equipment" in factories,

52. For critical review of British rearmament efforts, cf. special articles, *The Economist*, January 22, 1938; February 5, 1938; *United Services Review*, January 6, 1938.

53. Estimate of Geoffrey Crowther, Assistant Editor of *The Economist* in *New York Times*, April 24, 1938.

54. *The Economist*, March 5, 1938, p. 485.

55. *Ibid.*, January 22, 1938.

56. "The Long-Term Budget Problem," *The Economist*, June 11, 1938, pp. 591-97.

naval bases, etc.⁵⁷ In effect, these heavy government expenditures are similar to the public works schemes adopted in the United States, France and Germany. They are a source of concern to British economists, however, because they are a "non-productive, non-yielding public works scheme," financed in large part by public borrowing.⁵⁸ Thus, as the authors of the memorandum on Britain's debt problem observe, "when rearmament is at an end, we shall be confronted accordingly with a problem of industrial demobilization similar to that which arose after the war; and this problem will be the more difficult in that the industries in which redundant productive capacity is to be expected are largely the constructional industries which tend in any case to be the worst sufferers in an industrial depression."⁵⁹

As long as rearmament continues to be a vital necessity, the government is compelled to continue this uneconomic diversion of capital into the construction industries, regardless of budget deficits, and also to intervene, wherever necessary, to assure the effective mobilization of the industrial and financial resources of the nation for war. In presenting the budget for 1938-1939, Sir John Simon revealed that the government was already operating in some fields as though the country were at war. Acting without first seeking the consent of Parliament, the government early in 1938 secretly purchased enough wheat, sugar, and whale oil (for margarine) to supply the civilian population "during the early months of an emergency."⁶⁰ Parliament later sanctioned this purchase, and was informed of the detailed plans for food control worked out by the Defense Plan Department of the Board of Trade. These plans call for the licensing of importers, wholesalers, distributors and even consumers, and the imposition of rationing schemes for important foods almost from the outset of hostilities.⁶¹

The vast "shadow" factory plan, evolved by the Air Ministry in 1936 to speed up airplane production, introduced a new relationship between the government and private industry. Under this plan the leading automobile companies were asked to build and equip new factories at the government's expense for mass production of airplane motors

and standardized bodies and parts, to be assembled at central assembly plants.⁶² Airplane manufacturers were offered royalties for the use of their designs for planes and engines. The Air Ministry encountered many obstacles and delays in organizing the plan, and actual production did not get under way until late in 1937. Industrialists complained against administrative red tape and interference with the flow of essential components. The trade unions, charging that the employers were using the emergency to undermine conditions of labor, refused to relax union regulations and declined to be stampeded into giving employers a free hand.⁶³ In June 1938, the Amalgamated Engineering Union took a firm stand against the "dilution" of skilled workers in order to speed up rearmament, and announced that it would not tolerate any interference with union rights and privileges.

That Britain will be compelled to adopt conscription at the outbreak of a major war is tacitly admitted in British mobilization plans. When Sir Thomas Inskip, Minister for Coordination of Defense, informed the House of Commons on May 28, 1938 that such plans for "general conscription" had been prepared by the government, his words created a sensation and drew sharp criticism from Labor spokesmen who feared wholesale regimentation of manpower, including labor. Prime Minister Chamberlain stoutly denied that the conscription plan went beyond compulsory military service.⁶⁴ Nevertheless, preliminary mobilization has already begun. In the spring of 1938 thousands of men and women all over Great Britain enrolled in response to Home Secretary Sir Samuel Hoare's appeal for 1,000,000 anti-air-raid volunteers,⁶⁵ as other thousands volunteered for "national service" in home defense activities. Answering Labor critics in the House of Commons on March 15, Prime Minister Chamberlain summed up the position of the government in these solemn words:

"I do not know whether you would like us to imitate Germany in the measures she has employed in regimenting her country for the production of armaments. We may have to. But we will not do

57. Compiled from *Army, Navy and Air Estimates, 1938*, cited.

58. Cf. D. Graham Hutton, "The Economic Progress of Britain," *Foreign Affairs*, January 1938.

59. *The Economist*, June 11, 1938, p. 595.

60. Cf. speech of Sir John Simon, *The Times*, April 27, 1938.

61. Great Britain, Defense Plan Department, Board of Trade, *Report on Food Control*; cf. also *New York Times*, April 25, 1938.

62. The original companies to construct shadow factories were the Austen Motor Company, Daimler, Rootes Securities, Ltd., Rover Motor Company, Standard Motor Company. The Morris Motor Company, headed by Lord Nuffield, criticized the plan at the beginning but later agreed to cooperate. Cf. *Jane's All the World's Aircraft, 1937* (London, Samson Low, Marston, 1937), p. ii.

63. *The Economist*, June 4, 1938, p. 529; *New Statesman and Nation* (London), May 21, 1938, p. 860.

64. *The Times*, May 30, 1938.

65. After months of delay in organizing measures for defense against air attack, Parliament finally passed the Air Raid Precautions Act in December 1937. Cf. *The Economist*, December 11, 1937.

it until we are convinced that nothing else will serve our purpose."⁶⁶

France

France's rearmament program, while less costly than Britain's, has dominated the economic and financial situation of the nation to an even greater extent. Armament expenditures were doubled between 1934 and 1938, rising from 11.4 billion francs to over 26 billion. The largest part of this increase was spent on "capital investments" in armament plants and airplane factories or on construction of war material—airplanes, naval vessels, army ordnance and munitions. During 1937 about 10 billion francs (out of the total defense budget of 20.6 billion) was used for replenishment of war material; in 1938 approximately 15 billion francs was allocated for this purpose.⁶⁷ These authorized expenditures were carried in a separate "extraordinary" budget to be financed by borrowing, and later consolidated in a special national defense fund.

Deficit financing was no innovation in France,

and unbalanced budgets have been the rule rather than the exception during most of the post-war period. In the early post-war years, the reconstruction of devastated areas placed a heavy drain on the treasury; in the late 1920's and early 1930's the expenditures on the Maginot line fortifications were carried outside of the ordinary budget. But the really heavy deficits did not occur until after 1931, when France experienced the effects of the depression. From 1932 through 1936, the deficit increased by more than 70 billion francs.⁶⁸ During these years the country faced a succession of financial crises. The fall in prices caused French national income to drop from 250 billion to 190 billion annually; income from taxes fell off sharply; successive devaluations of the pound and the dollar accentuated the unfavorable trade balance; social unrest hastened the flight of capital.⁶⁹

The extent to which the requirements of rearmament have dominated the French financial situation during the past two years may be seen from the following figures.

GOVERNMENT EXPENDITURE IN FRANCE

(in billions of francs)

	1937			1938		
	Ordinary Budget	Extraordinary Budget	Per Cent of Total Expenditures	Ordinary Budget	Extraordinary Budget	Per Cent of Total Expenditures
National Defense	11.0	9.5	32.0	11.0	11.2	32.2
Civil Administration and Public Works	16.6	6.6	36.1	19.2	3.0	32.2
Public Debt and Pensions	20.6	32.0	22.5	32.3
Total	48.2	16.0		52.7	14.2	

These figures show that one-third of the total expenditure authorized in the two budgets is spent on armaments; one-third on civil administration, including public works; and one-third on pensions (civil and military) and the public debt.⁷⁰ The ordinary budget has changed very little over the past five or six years, and is theoretically "balanced" by income. The deficit, which is found in the extraordinary budget, is due almost entirely to rearmament and public works. The actual deficit is even

greater than is shown in the table, as additional armament expenditures have been authorized, and postal, railroad and other subsidies are carried in separate accounts. Taking these items into account, the total treasury deficit for 1937 exceeded 25 billion, while the deficit for 1938 is expected to pass 30 billion francs,⁷¹ of which at least 16 billion will be spent for rearmament.

Charles Rist, the prominent French economist, recently summed up the financial problem in these words: "How can France, whose total national income does not exceed 250 billion francs, support a budget of 85 billion when only 55 billion of that sum is provided by taxes and when the remaining 30 billions must be raised in some other way?"⁷² In 1936 the answer of the Blum government was: revive business and restore budgetary equilibrium by vast public expenditures. But the first Popular

66. Cf. *The Times*, March 16, 1938.

67. Cf. *Projet de Loi portant fixation du budget général de l'exercice 1937*, *Journal Officiel de la République Française*, January 1, 1937; *Projet 1938*, *Journal Officiel*, January 1, 1938.

68. This figure does not include postal, telegraph and other deficits not covered in the budget. Cf. *The Economist*, December 11, 1937, p. 526.

69. For a critical review of French financial situation, cf. Charles Rist, "The Financial Situation of France," *Foreign Affairs*, July 1938, pp. 601-11.

70. In 1934 armaments accounted for 23.9 per cent of total expenditure.

71. Cf. Rist, "The Financial Situation of France," cited, p. 604.

72. *Ibid.*, p. 607.

Front Cabinet failed to raise the productivity of French industry or to increase the national income; instead, its social reforms boosted costs of production and widened the gap between income and outgo. The large deficits of 1936 and 1937 were met by long-term and short-term loans carrying high interest rates, and by heavy borrowing from the Bank of France. On March 10, 1937 Parliament authorized the Blum government to float the first national defense loan of 10.5 billion francs at 4½ per cent interest.⁷³ By June, however, the funds had been spent, the treasury was almost empty and the government was again forced to draw on the Bank of France for new advances. When Blum's request for full powers to act by decree "for the recovery of public finance" was turned down by the hostile conservative Senate on June 19, 1937, the Popular Front Cabinet resigned.⁷⁴

Facing the same problem of how to find money for the treasury, the Chautemps and Daladier Cabinets adopted a more conservative program based on expansion of credit and a moderate increase in taxation. The Senate gave Daladier's national defense government even wider powers to rule by decree than those it had denied to Blum. Making full use of these powers, the Daladier Cabinet issued a series of decrees beginning May 3, 1938 under which all taxes were raised by 8 per cent, the budget was unified by incorporating separate accounts for pensions, railroads and public works in the general budget, the 40-hour-week law was modified, and other measures were adopted to stimulate production and tighten the nation's credit.⁷⁵ The tax increase was expected to yield about 4 billion francs, but in the same series of decrees the government opened a new credit of 4.7 billion for rearmament, thus raising the total amount authorized for national defense in 1938 to the staggering sum of 26 billion.⁷⁶ In addition the navy was authorized to begin construction of two battleships, one cruiser, seven submarines and other auxiliary vessels at a cost not to exceed five billion francs between 1938 and 1942. Thus, despite revived confidence and a slight recovery in heavy industry, the Daladier government faced a total deficit approaching 35 billion francs in 1938.

73. The loan was approved by a vote of 470 to 46, with the Popular Front parties voting solidly for the bill, *Journal Officiel*, March 10, 1937.

74. For an analysis of the action of the Senate, cf. *L'Europe Nouvelle*, June 26, 1937.

75. Cf. *Journal Officiel*, May 3, 1938, pp. 4948-70. For review of economic situation at this period, cf. Frédéric Jenny, *Revue Politique et Parlementaire*, June 10, 1938, p. 513.

76. The National Defense credit formed part of a special Defense Fund, created by the law of March 6, 1938, to be financed by borrowing.

While the Daladier decrees hastened the return of capital and promised to increase production, in some respects they resembled measures adopted by totalitarian states. To encourage tourist traffic, France followed the example of Germany and Italy in issuing special cards entitling travelers to lower rates for transportation, gasoline, etc.⁷⁷ Police regulations were tightened to control the movement of certain classes of undesirable foreigners. Industries engaged in producing munitions and other war materials are subject to closer government regulation, and required to pay a surtax on profits. Foreign trade subsidies and quotas are extended. During the Czechoslovakian crisis in late August and September, the Daladier Cabinet gave its approval to drastic modifications in the 40-hour-week law, allowing the government to demand additional hours in all industries engaged in national defense, internal security and public works.⁷⁸

Nationalization of a part of the munitions industry was carried out under the Blum government in 1936. Some twelve munitions firms, including the famous Schneider Creusot company, were expropriated under the law of August 11, 1936. Other firms have been partially nationalized or placed under strict state control. In the case of the aviation industry, the government purchased the majority stock in seventeen airplane and engine factories, which were organized into six large national companies.⁷⁹ The iron, steel and chemical industries have not been nationalized, but remain under the control of centralized cartels.

The wartime controls contemplated in the recent French mobilization law, passed by the Chamber of Deputies on March 24, 1938—but not yet adopted by the Senate—vest almost unlimited powers in the hands of the government. The same provisions for control of production, distribution and transportation of all essential materials, price controls, settlement of labor disputes, etc., which are found in both democratic and totalitarian states, are incorporated in the French law.⁸⁰

United States

Despite its position of security in the Western Hemisphere, the United States has not been immune from the effects of the world armament race. Total defense expenditures have approximately

77. *Journal Officiel*, May 6, 1938, p. 5145.

78. *New York Times*, August 31, 1938, September 8, 1938.

79. For the text of all laws, decrees and regulations governing national control of munitions in France and other countries, cf. League of Nations Conference for the Reduction and Limitation of Armaments, "National Control of the Manufacture of and Trade in Arms" Conf. D. 184, Geneva, April 14, 1938.

80. Cf. *Projet de Loi, Sur l'organisation générale de la Nation pour le temps de Guerre*, Sénat No. 205, March 27, 1938.

doubled during the past six years, rising from 499 million dollars in 1934 to 1,065 million in 1938-1939. Thus the rate of increase has been almost as rapid in this country as in France, and only slightly less than in Great Britain. On May 17, 1938 President Roosevelt signed the naval expansion bill authorizing construction of 46 new warships and 26 auxiliaries at an estimated cost of \$1,156,000,000, and providing a 20 per cent increase in the authorized strength of the navy.⁸¹ Supplementary army and navy appropriations adopted by the 75th Congress carried total national defense expenditures well

over a billion dollars for the first time since the World War. About one-third of this sum will be spent on construction of new warships and airplanes, purchase of ordnance equipment, expansion of naval and air bases, and strengthening of seacoast defenses.⁸²

While the rising cost of armament has contributed to the huge budget deficit piled up since 1933, it has not been the chief cause of deficit financing in the United States. The relation of national defense to the federal budget is shown in the following table.

BUDGET POSITION OF U.S.¹
(in millions of dollars)

	1933-34	1934-35	1935-36	1936-37	1937-38 ²	1938-39 ²
Effective Tax Revenue	3,115	3,800	4,115	5,293	6,320	5,919
Expenditure						
Ordinary Civil Expenditure	475	554	733	814	827	760
National Defense	499	656	870	886	957	1,065
Interest on National Debt						
and Pensions	1,310	1,426	3,098	1,994	1,500	1,514
Public Works and Relief	2,465	3,123	3,254	3,545	2,637	1,885
All other	1,996	1,043	521	762	1,487	1,645
Total Expenditure	6,745	6,802	8,476	8,001	7,408	6,869

1. Compiled from the Budget of the United States Government, for fiscal year ending June 30, 1939, p. x.

2. All figures for 1938 and 1939 are estimates.

These figures show that public works and unemployment relief, rather than armament expenditure, have accounted for the largest part of the government deficit since 1934. Should the present rate of armament spending continue, however, the United States will be faced with a series of national defense budgets of \$1,500,000,000 beginning in 1940-1941, representing about 25 per cent of the total federal revenue from taxes.

Definite economic effects of rearmament are found in several quarters. The shipbuilding industry, the aviation companies, and certain sections of the metallurgical and machine tool industries are entering a boom period with production at new high levels. The stock of potential war industries reached new highs in the recovery movement in the summer of 1938. National defense needs were the primary motivation for the program to rebuild the American merchant marine, launched by the Maritime Commission in November 1937.⁸³ This

program, calling for 20 new merchant vessels to be laid down this year, extends government control over American shipping in many new directions.

Evidence that the United States will not be exempt from dictatorial controls in time of war is found in the May bill reported by the House Military Affairs Committee in the 75th Congress. This bill (originally introduced as the Sheppard-Hill bill) embodies the main provisions of the industrial mobilization plan perfected by the War Department since 1932.⁸⁴ It authorizes the President to "draft into the military service all men between 21 and 31; to fix prices and rents"; proclaim and control "the material resources, industrial organizations, public services, and security and commodity exchanges"; license industry and determine the priority in manufacture and distribution of goods; and require registration of manufacturers "under such rules and regulations" as he may prescribe. While this bill was not passed at the last session of Congress, it is certain to be reintroduced in 1939, and it serves as a sharp reminder of the totalitarian forms contemplated by all the democracies for the waging of totalitarian war.

81. Cf. *Congressional Record*, May 19, 1938, p. 9397.

82. Cf. *Budget of the United States Government for the Fiscal Year 1939* (Washington, D.C., U.S. Government Printing Office), pp. 60-61, 71-73.

83. Cf. U.S. Maritime Commission, "Economic Survey of the American Merchant Marine" (Washington, D.C., U.S. Government Printing Office), November 10, 1937.

84. Cf. House of Representatives, Military Affairs Committee, Report on H.R. 9604.

CONCLUSION

The phenomenal increase of world armament expenditure from approximately 4 billion dollars in 1933 to more than 17 billion in 1938 had introduced a new and disturbing factor into world economy even before the Czechoslovakian crisis raised the specter of immediate war. Quite apart from the political tension created by swollen armaments, the rapid acceleration of arms expenditure has already distorted the national economy of virtually every industrial nation. Internally, it has diverted capital and savings into non-productive state enterprises and forced the abnormal expansion of heavy industry to a point well beyond the requirements of peace time. In the short run, this huge diversion of capital and savings has raised prices, stimulated industrial activity and provided employment in the construction and metallurgical industries. In the long run, if the present trend is not reversed, it threatens to lead to ruinous inflation or national bankruptcy. The consequences are already apparent in both the democracies and the dictatorships. No government today is able to pay for rearmament entirely out of savings. The Soviet Union, which has made the attempt, has been forced to sacrifice the demand for much-needed consumers' goods and to appropriate nearly 40 per cent of its national income to the requirements of defense. While the totalitarian states have been able to impose a higher level of forced savings on their peoples than the democracies, they have not escaped the dangers of heavy deficit financing. In paying for rearmament, the dictatorships and de-

mocracies alike are confronted with unbalanced budgets, mounting deficits and the prospect of continued deficit financing.

How long can the present trend continue, even if general war is postponed or avoided? Few economists have been willing to hazard a guess, partly because the problem of armaments is essentially a political problem, partly because the economic principles which were assumed to govern the "normal" pre-war capitalist economy no longer operate in totalitarian states. Nations can "afford" gigantic armament programs just so long as they are able to impose a high level of savings on their peoples, or maintain the confidence of their peoples, and export enough to pay for their essential imports. But the history of the past few years clearly demonstrates that this leads almost inevitably to dictatorship or government intervention. In order to accomplish its purpose, the state is forced to appropriate a larger share of the national income, accelerate its own investment activity, intervene in the operations of the national economy, and suppress civil liberties. For the democracies, the ultimate cost of unlimited armament competition may be the loss of their free economies and the undermining of democracy itself.

The economic consequences of a general war are far more alarming. Should war last more than a few months, the economic system of every nation involved is almost certain to be shattered, and the impact will be felt even by those countries which are not directly involved at the outset.